

**REMARKS**

Claims 21 – 23, 25, and 26 – 31 are currently pending and Claims 1 – 20, and 24 are canceled. No new matter has been introduced into the claims by the amendment. New Claims 27 – 31 contain the subject matter of previously presented Claims 21 – 23, 25, and 26 with the additional step that an additive, excluding salt, is used in combination with the polysaccharides. Support for the new claims is found at page 7, line 8 to page 8, line 19 naming the various additives that may be used in combination with the polysaccharides, in which salts, including calcium fortifiers, are listed. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See *In re Johnson*, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977).

Applicants' respectfully disagree with the Examiner and traverse the rejections with the following remarks.

**Rejection of Claims 21 – 23, 25, and 26 under 35 U.S.C. § 103**

The Examiner rejects Claims 21 – 23, 25, and 26 under 35 U.S.C. § 103 as being obvious in view of the combination of U.S. Patent 5,972,399 to Lapre, et al. ("Lapre"), Japanese Patent Application 11-249464 to Takahashi, et al. ("Takahashi"), and a non-patent publication, Jarvis, M.C., et al., "The polysaccharide structure of potato cell walls: Chemical fractionation," Planta (1981) 152:93-100 ("Jarvis"). Applicants respectfully disagree.

Applicants' invention is a method directed to an improved method of preparing cereal foods by preventing stickiness and clumping and improving the luster and loosening properties of the cereal foods after storage. None of the art cited by the Examiner is directed at solving this problem; therefore, the Examiner must provide some other reasoning supporting the combination

of the references in a way that will render Applicants' invention obvious. Rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). See also *KSR*, 550 U.S. at \_\_\_, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval). The question under 35 U.S.C. § 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983).

The Examiner asserts that Lapre teaches a water-soluble polysaccharide. This is incorrect. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). Lapre teaches a coated food using a polysaccharide that is combined with a cation, so that the polysaccharides cross-link and become insoluble forming a coating around a core of food. (Lapre, Col. 9, lines 34 – 40). The purpose is to reduce the glycemic response to the food. (Lapre, Abstract). The Examiner focuses on Lapre's starting material, which is water-soluble, but ignores the rest of the disclosure. The Examiner must consider the prior art reference as a whole. Lapre prefers that the coating of polysaccharides is insoluble in water. (Lapre, Col. 8, lines 10-11). The coating created by Lapre's process may be partially soluble, if the cations are not able to achieve complete cross-linking; however, this is not a justification to ignore the essence of Lapre's invention. If the polysaccharides are soluble, the coating will not remain on the food core and destroy Lapre's invention. This is a teaching away of Applicants' invention which requires water-soluble polysaccharides.

Regarding new Claims 27 – 31, Applicants' invention does not include polysaccharides that are cross-linked. Lapre teaches an insoluble coating that is made of polysaccharides that are cross-linked using a cation. (Lapre, Col. 9, lines 52 – 64). The cations are provided as edible salts, such as calcium chloride. (Lapre, Col. 8, lines 1 – 7). In one embodiment of Applicants' invention, the polysaccharides can be used in combination with an additive, such as a salt. (Specification, page 8, lines 14 – 19); however, this embodiment is explicitly disclaimed in Claims 27 – 31. Because Applicants' invention does not include salt as an additive, there can be no cross-linking. Lapre requires the presence of a salt; therefore, Lapre does not disclose all of the elements of Claims 27 – 31.

The Examiner asserts that potato polysaccharides inherently have a uronic acid content of 0 to 20% and cites Figure 1 in Jarvis. The Examiner incorrectly reads the graph depicted in Figure 1. Jarvis extracted polysaccharides from 100 mg of potato cell walls by stirring it vigorously with 50 cm<sup>3</sup> of oxalate citrate buffer. (Jarvis, Results, page 94) Over the course of two hours, Jarvis would take several 5 cm<sup>3</sup> samples of the supernatant containing the extracted starch and polysaccharides. Figure 1 is a representation of the amount of polysaccharides and starch extracted over time. After two hours of stirring 100 mg of potato cell walls in oxalate citrate buffer, Jarvis was able to extract approximately 50 mg of starch and 40 mg of polysaccharides. Of the 40 mg of polysaccharides, 20 mg constituted uronic acid, which is 50%. However, much of the polysaccharides remained in the cell walls using this extraction procedure. (Jarvis, page 96). There is no final determination as to the proportion of uronic acids in potato polysaccharides. Therefore, Figure 1 provides absolutely no basis for the Examiner's conclusion that potato polysaccharides comprise 0 to 20 % uronic acids.

The Examiner also incorrectly concludes from Jarvis that because polysaccharides

contain uronic acids, one in the art would have a reasonable expectation of success because Jarvis illustrates the inherent components of potato polysaccharides are the same as that which is claimed. As previously discussed, Jarvis does not illustrate that the claimed composition is inherent in potato polysaccharides. Also, Jarvis is a paper on various methods of extracting polysaccharides from potato cell walls. There is no discussion on the success of using polysaccharides to improve the properties of cooked cereal foods. The Examiner is applying improper hindsight reasoning. There is no expectation of success without Applicants' discovery of the improved characteristics of cooked cereal foods when prepared with water-soluble polysaccharides derived from white potatoes.

None of the references provide a motivation, nor has the Examiner provided some independent motivation for varying the starch content and uronic acid content of the polysaccharides to obtain an ideal additive to provide improved loosening properties of cooked rice or pasta. The mere existence of uronic acid in white potatoes does not provide any motivation that varying the constituents will achieve the results of the present invention or provide any advantage.

None of the references disclose the elements of the present invention specifying the appropriate starch content for the polysaccharide or the amount of uronic acids that must be present to improve the loosening property of the cooked rice or pasta. All of the claims are patentable over the prior art of record. Reconsideration and withdrawal of the rejection under 35 U.S.C. § 103 is respectfully requested.

#### **CONCLUSION**

In view of the foregoing amendments and remarks, Applicants submit that the claims presented herewith are patentable over the prior art of record and in condition for allowance.

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Applicant respectfully solicits prompt action thereon. If any questions remain, the Examiner is invited to phone the undersigned attorney.

Respectfully submitted,

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